# **Air Force Civil Engineer Center**



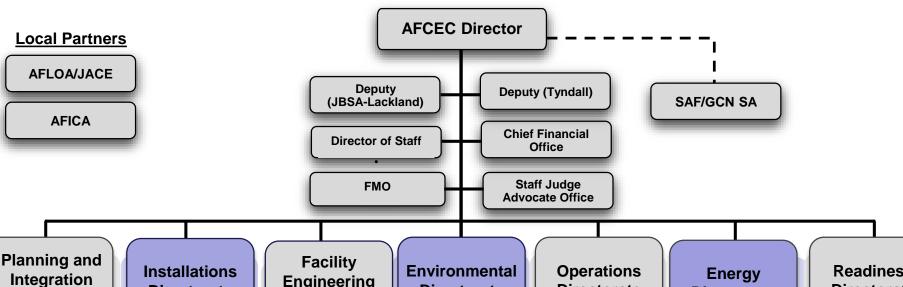
# **Director's View**

Randy Brown
Director
4 May 2017



# **AFCEC Organization**





# Directorate

- Strategic enterprise wide planning
- Enterprise-wide output standards
- AFCAMP Investment Plan - IPLS (Budget year) development / integration
- AFAMP Investment Plan (POM) development
- Enterprise procurement

# Directorate

- AF real estate (RE) management
- RE development (value-based & third party financed, REPI leases, GSA leases)
- Housing Portfolio mamt.
- Utilities Privatization Program mgmt.
- Base Realignment and Closure (BRAC) Program

### **Engineering Directorate**

- Centralized Design & Construction services for MILCON and O&M funded projects
- Standardized designs for similar facility and infrastructure
- Expertise in all facility construction

# **Directorate**

- Planning, program and project validation, prioritization. strategy, technical support & execution for:
- Compliance
- Restoration
- Natural and Cultural Resources
- NEPA Center
- ·Leg and Reg Engage

## Directorate

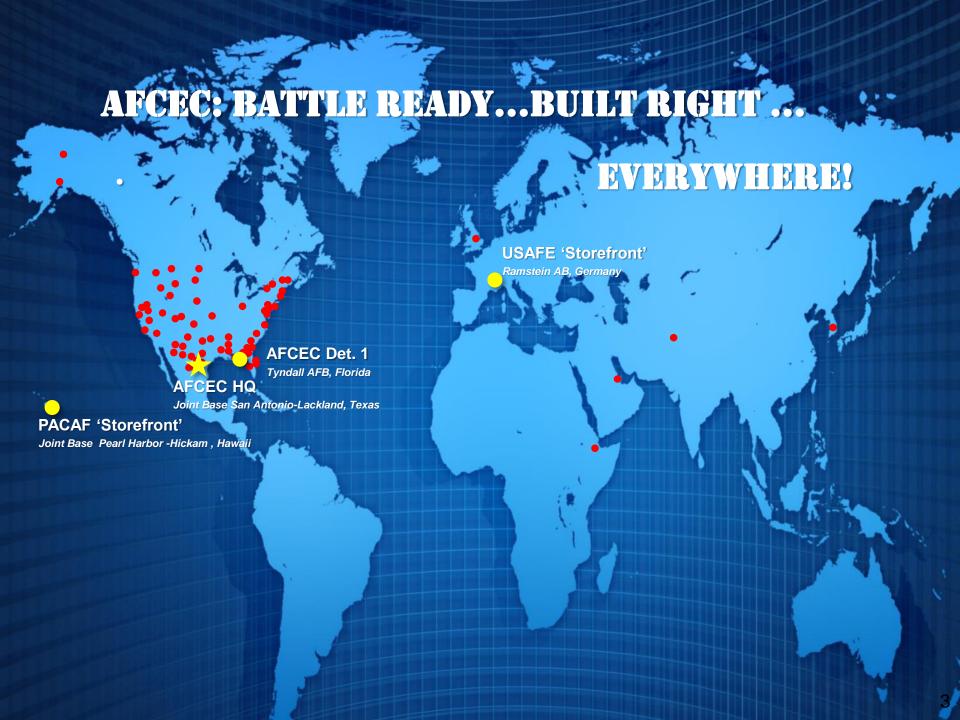
- Facility ops analysis standardization support & assessments
- Preventative maint. oversight
- Asset Visibility
- Engineer SMEs
- Enlisted FDM
- Airfield pavement evaluations & CE Maint, Inspection & Repair Teams

## **Directorate**

- Facility energy and utility rate negotiation support
- Energy opportunity clearinghouse
- Renewable energy focal point
- Centralized ESPC/UESC program mgt
- Utilities Privatization program mgt

### Readiness **Directorate**

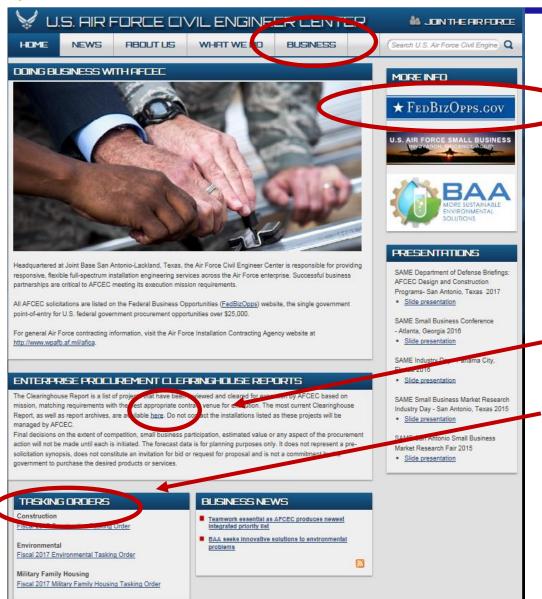
- PRIME BEEF, RED HORSE. Expeditionary Engineering, Fire. EOD, and **Emergency Mgmnt**
- AF Contract Augmentation Program (AFCAP) support
- Reach-back center support
- CE RDT&E





# **Business Opportunities**





www.afcec.af.mil

**All Solicitations** 

Projects executed by AFCEC (SATOC, AE13, GEITA, etc)

Construction, Environmental, and Housing Projects with authority (majority executed by installation)



# Top Issues



- FY17/18 Funding Situation
- Mission, Installation, & Energy Resiliency
- Execution of High Visibility Projects
  - European Infrastructure Consolidation
  - European Reassurance Initiative
  - MILCON & FSRM
- Drinking Water & PFOS/PFOA/AFFF



# Top Issues



- Data Informed Decision Making
  - Integrated Priority List (IPL)
  - Construction Tasking Order (CTO)
- TRIRIGA
- Support to Installations
  - Planning
  - Ops
- Airfield Damage Repair



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Force

# CE ICS Cybersecurity Initiative Air Force Mission Assurance



### SCADA Systems



**DCS Systems** 



**PLC Systems** 



Unsecure CE ICS Infrastructure is a Threat to the Air Force Mission

CE ICS Cyber Vulnerabilities Jeopardize Critical Infrastructure that Enable Air Force Operations

Supporting and Resourcing CE ICS Cybersecurity
Provides Mission Assurance

Cyber Resilient Infrastructure is Essential for Mission Assurance



SCROR

DCS SYSTEMS

PLC SYSTEMS







POWER

WATER

COMMUNICATIONS







UNSECURE CE ICS INFRASTRUCTURE = THREAT TO AF MISSION

SPACE & SATELLITE OPERATIONS



RADAR **OPERATIONS** 



RIRFIELD **OPERATIONS** 







# DISRUPT AIR FORCE SUPPORT COCOM MISSIONS

### AIR FORCE MISSION IMPACTS

- O AIR AND SPACE SUPERIORITY
- O INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE
- O RAPID GLOBAL MOBILITY
- **○** GLOBAL STRIKE
- O COMMAND AND CONTROL



# CE ICS Cybersecurity Initiative CE ICS SDDP *Approved Capabilities*



#### **CURRENT STATE**

#### Lack of CE ICS Asset Visibility

- Ineffective resource management (e.g., manpower, equipment, funding requirements)
- Inability to efficiently assess condition and energy consumption of assets

#### Lack of Standardization

- Disparate CE ICS that cannot be effectively managed
- Lack of secure data integration and visibility

#### **Vulnerable to Cyber-Attacks**

 Disruption/failure of Air Force mission operations

### **Non-Compliance with LRPs**

- DODI 8510.01, *RMF for DOD IT*
- DODI 8500.01, Cybersecurity

#### **Decentralized CE ICS**

 Acquisition, management, security, maintenance, sustainment, and operation

### **Process Improvements**



•Gaps between Current and Future State

#### **FUTURE STATE**

# Enterprise-Wide, Integrated ICS Asset Visibility and Reporting

- Automated collection and reporting of ICS data
- Integrated data from diverse and disparate ICS

#### Standardization of ICS

 Standardized ICS equipment, interfaces, processes, and contracts

#### **ICS Security Risk Mitigation**

Continuously monitored networks ->
increased resiliency against cyberattacks and non-malicious events

### **Enterprise-Wide ICS Planning**

- Centrally managed resources
- · Data-driven decision-making

# **Enterprise-Wide ICS Maintenance and Sustainment**

 Effectively managed performance and health of ICS networks

The Enculturation of a Secure and Effectively Managed CE Cybersecurity Enterprise



